

SAN BENITO COUNTY

INFORMATION TECHNOLOGY (IT) 2017

INFORMATION TECHNOLOGY DIVISION
DEPARTMENT OF INTERNAL SERVICES



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Plan Overview

Like many government entities faced with growth in demand for services while confronting a strained budget, our county continues to experience significant challenges and new opportunities where technological innovation is essential. These challenges and opportunities are fueled by expectations from the County's constituents and business community to interact and conduct business with the County utilizing technology and web-based capabilities that enhance information, communication, and transactions. Through the use of technology our county is able to provide a variety of formats to enable transparency, access, engagement, and open government. The rapidly changing nature of IT highlights the importance of thoughtfully deploying technology that embraces supportable standards.

The Information Technology (IT) Division is committed to excellence and to ensure the business of government is efficient by providing an infrastructure that is reliable, lasting, financially viable, and secure. IT has been in maintenance mode for some time and over the last few years, a lot of systems that are critical to our environment (including all network and server-based applications) are showing their age and signs of failing. This is directly impacting our ability to serve the community. Security is becoming more and more complex; the current solutions are in need of updating and support renewals to provide an appropriate level of security. Last year IT saw a significant increase in outages and issues due to the age and supportability of the equipment providing vital services. IT has compiled a high-priority list of equipment that must be replaced immediately in order to bring the IT infrastructure and back-end systems up to supportable standards. These initial expenditures will allow IT to provide ongoing improvements to public facing services and upgrade the IT environment to a supportable and modern standard.

The highest-priority items are listed below:

- Enterprise storage replacement hardware
- Backup and archive solution
- Virtualization technology refresh and upgrade
- Server hardware replacement
- Switch device replacement
- iPrism upgrade – content filtering and security
- Fortigate – gateway security device that protects from Internet threats

The above will provide the foundation to implement further improvements to reduce the chance of outages.

Immediately after the critical refresh (see above) the following upgrades are of the utmost importance;

- Active Directory assessment and upgrade - clean up and upgrade of core security and management software
- Server Operating System optimization – decommissioning of unsupported operating systems
- Email modernization - spam filtering, security, sustainability
- Wireless Networking Implementation (WiFi) - expanding access in key locations
- Device security - anti-virus, encryption, tracking

The items mentioned above are dependent on the items listed in the highest-priority section (see above). Upgrading the core software without replacing the hardware it runs on is risky, by first replacing the failing infrastructure we ensure our upgraded systems will function efficiently.

High-priority Items for Enhancing the County's IT Infrastructure

Enterprise Storage Replacement hardware – Priority 1

The current enterprise storage in both NOCs are Hitachi Data Systems (HDS) devices that are approaching (9/17) a status known as “end of life” by the manufacturer. This places the County’s data at risk of an unrecoverable failure or extended outage. These devices house all data that is hosted on the COSB servers.

This item is required before being able to perform any of the other improvements that are planned. COSB must continue to have redundant supported storage solutions using current and efficient technologies to provide the foundation upon which to build. This effort will require no less than 2 storage units sized and sourced for the current needs and accommodating storage growth as needed. No less than 1 switch for each NOC will need to be added to accommodate best practices.

Product: Tegile 52TB - [Quote # 41417-2](#)

Price (initial price includes maintenance and Support 3 years 24/7 4hr replacement): \$91,000 +Tax

Ongoing Maintenance and Support per year: Estimated ongoing support per year: \$7,000

Storage Switch

Product: Cisco Nexus [Quote # 41317-4](#)

Price (initial price includes maintenance and Support 3 Years Basic SmartNet 8x5 / M-F): \$45,000 +Tax

Ongoing Maintenance and Support per year: Estimated ongoing support per year: \$1,333

Backup and Archive Solution

Backups are the backbone of a disaster recovery model. COSB has utilized the HDS packaged CommVault solution for backup for many years. Over the last year, support for this solution expired. The solution is dated and currently in a failed state. IT has taken temporary steps to provide ongoing backup capabilities, but requires a new and permanent solution. IT is heavily leveraging virtualization and the solution proposed will be optimized for this as well.

Product: Veeam [Quote # 40417-6](#)

Price (initial price includes maintenance and support): \$50,000+tax

Ongoing maintenance and support per year: \$4,000

Virtualization Technology refresh and upgrade

The County’s infrastructure is almost entirely virtualized. The currently deployed virtualization technology is aged, unsupported, and using less than optimal features that have improved over the years in the newer solutions currently available. IT will deploy a new virtualization solution that is current and will leverage these new functions and features to improve and standardize the virtual model at COSB.

Product: VMWare 14 CPUs [Quote # 40417-5 Rev. 1](#)

Price (initial price includes maintenance and Support for 3 years): \$108,000

Ongoing Maintenance and Support per year: Estimated ongoing support per year: \$18,000

Server hardware replacement

Servers are dated and “end of life”. IT will replace these and leverage the new virtual environment to virtualize all servers that can be. It is expected that only a few servers that IT is responsible for will not be virtualized. This means that the support for server hardware will be reduced and outages related to hardware will be minimized.

Product: DELL POWEREDGE R730 [Quote # 40717-4 Rev. 1](#)

Price (initial price includes maintenance and Support 3Years Pro Support/24x7 Support, NBD Parts):

\$91,000 +Tax

Ongoing Maintenance and Support per year: \$13,000

Switch Device Replacement

The current switches are out of date and many are “end of life”. Industry improvements in capacities with regards to speed and our need for additional capacity requires more than used replacements. With the evolving County infrastructure and to accommodate the improvements to services, IT needs to upgrade the network to provide the modern framework to build on. Completing this will allow simplification of network design and reduce the risk of extended failure.

Product: TBD Estimated cost \$500,000

Price (initial price includes maintenance and Support):

Ongoing Maintenance and Support per year:

Cost Table



SAN BENITO COUNTY

PRODUCT DESCRIPTION	PRICE	Ongoing Maintenance and Support per year
Enterprise Storage Replacement Hardware Tegile 52TB - 3yrs 24/7 4hr replacement	\$91,000.00	\$7,000.00
CiscoNexus StorageSwitch – 3yrs BasicSmartNet 8x5/M-F	\$45,000.00	\$1,333.00
Backup and Archive Solution Veeam - 1yr Premium 24/7 Support	\$50,000.00	\$4,000.00
Virtualization Technology Refresh and Upgrade VMWare 14 CPUs - 3yrs Support	\$108,000.00	\$18,000.00
Server Hardware Replacement Dell PowerEdge R730 - 3yrs Pro Support 24/7, NBD Parts	\$91,000.00	\$13,000.00
Switch Device Replacement <i>TBD Estimated Cost: \$500,000</i>		
(*Tax amount needed to be added to all price items)		
COSB High-priority Items for Enhancing County IT - Total KISCC - Implementation Assistance & Migration - Total Hrs	\$385,000.00 \$385,000.00	\$43,333.00